

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A system for maintaining translation consistency in a computer which includes a host processor designed to execute instructions of a host instruction set and software for translating instructions from a target instruction set to instructions of the host instruction set comprising:

hardware means for providing an indication whether a first memory address to be written stores a target instruction which has been translated to at least one host instruction that is stored at a second memory address, the at least one host instruction for execution by the host processor, the hardware means comprising:

a look-aside buffer including a plurality of storage locations for virtual addresses and associated physical addresses, and
a storage position in each storage location of the translation look aside buffer; and

software means for responding to the indication and for assuring that the at least one host instruction will not be utilized once the first memory address has been written, in which the software means removes the at least one host instruction from the second memory address.

2. (Previously Presented) A system for maintaining translation consistency as claimed in Claim 1 in which the hardware means comprises:

a look-aside buffer including a plurality of storage locations for virtual addresses and associated physical addresses, and
a storage position in each storage location of the translation look aside buffer.

3. (Previously Presented) A system for maintaining translation consistency as claimed in Claim 1 in which the software means invalidates the at least one host instruction by marking the at least one host instruction at the second memory address.

4. (Cancelled)

5. (Previously Presented) A system for maintaining translation consistency as claimed in Claim 1 in which the software means removes the at least one host instruction from memory from the second memory address.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Currently Amended) A memory controller comprising:
an address translation buffer including a plurality of storage locations in
which recently accessed virtual addresses are to be recorded and in which
physical addresses represented by the virtual addresses are to be recorded,
each of the storage locations including means for indicating
whether a physical address stores an instruction of a target instruction set

which has been translated to an instruction of a host instruction set for execution by a computer system including a host processor, the instruction of a host instruction set for execution by the memory controller; and

means for detecting an indication in a storage location to prevent a write access of the physical address and for indicating a subsequent operation before accessing the physical address, said means for detecting comprising:

means for generating an exception in response to detection of the indication, and

means for responding to the exception to indicate the subsequent operation to be taken with respect to the instruction of a host instruction set before accessing the physical address.

19. (Cancelled)

20. (Previously Presented) A memory controller as claimed in Claim 18 in which the means for indicating comprises a storage position in the storage location.